

REMARKS

The application has been amended and is believed to be in condition for allowance.

There are no outstanding formal matters.

Claim 19 has been added and recites that a minimum unit of each wire is the core thread. See cord threads 21 as disclosed by the specification and illustrated by the drawing figures.

Claims 1-18 stand rejected as obvious over Applicant's Admitted Prior Art (AAPA) in view of TAYLOR et al. 5,430,256 "TAYLOR").

The below remarks review the disclosure of TAYLOR in order to clarify what TAYLOR discloses and teaches to one of skill in the art.

In the Summary of the Invention section, it is disclosed that "The conductors of the invention envision bundles of wires with design features in materials and construction techniques as taught herein for more accurately transmitting audio signals including high current audio signals than has been heretofore attainable."

"One object of the invention is to provide a stranded bundle in which a plurality of wires are twisted around themselves without a 'spine' or 'core wire', such stranded bundle serving as a central bundle (or technically a core) around which a series of six identical bundles are disposed around the central bundle,

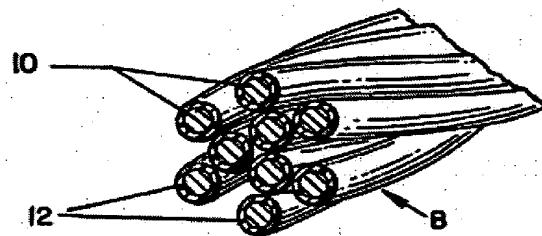
circumscribing the central bundle an equispaced arrangement as to each other."

Applicants refer to TAYLOR Figures 1-2 and column 2, beginning at line 33. There is disclosed that "The conductor as shown in FIG.1 comprises of plurality (nine in number) of strands of insulated wire 10 bundled in a twisted configuration and delineated a 'core bundle B'. Each individual strand is insulated as at 12." Thus, TAYLOR teaches a core bundle B comprising a plurality of strands of insulated wire 10 bundled in a twisted configuration. Each individual strand comprises insulation 12.

**U.S. Patent**

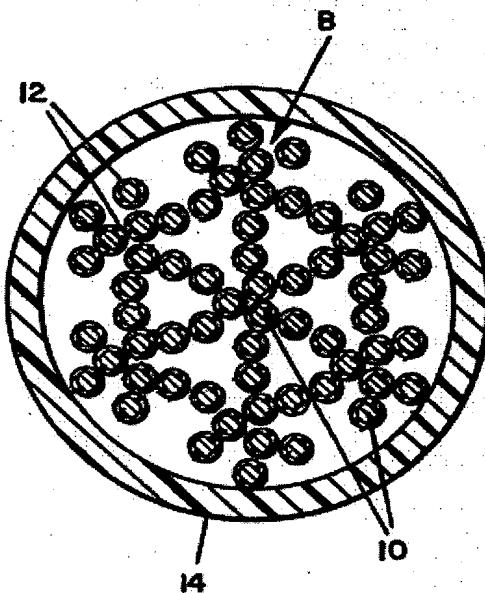
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**5,430,256**



**FIG. 1.**

"Shown in the cross sectional FIG. 2 (reproduced below) is a central 'core bundle' with six additional 'core bundles B' (each of the nine strands, FIG. 1 type), which additional 'core bundles' are equispaced in circumscribing manner around the central core bundle, with the seven bundles being enclosed within a fluoropolymer jacket." See also column 2, lines 40-43.



**FIG. 2.**

Thus, the teaching of TAYLOR centers a high audio quality wire using one of the nine strand conductors as a central bundle to obviate the need for a spine or core wire. However, as to the individual strands, the disclosure of TAYLOR is that the minimum units of an electric cord (the strands) are isolated (insulated) from each other.

Applicants appreciate the Response to Arguments section provide beginning on Page 3 of the Official Action.

Applicants have argued that the strands 10 of TAYLOR are insulated wires, that is, the disclosure of TAYLOR column 2, line 34, i.e., "strands of insulated wire 10".

Next, see Figures 1-3 showing the Prior Art ("AAPA"). In the AAPA, the electric cord 1 (Figure 3) comprises plural wire rods 1b, each wire rod 1b comprising plural wires 1a. The wire

rods 1b and the respective wires 1a are not insulated from each other.

In TAYLOR, a core bundle B comprises a plurality of strands of insulated wire 10. Each strand is insulated as at 12. See column 2, lines 33-37.

The TAYLOR disclosure is that each strand of wire 10 is insulated as at 12. Applying this disclosure to the AAPA of Figures 1-3, each core thread 11 would be insulated.

This does not result in the invention as disclosed or claimed. In contrast to the TAYLOR-modified AAPA, in the present invention, the core threads 21 of each wire are not insulated from each other, but rather the respective wires 2a are insulated from each other (Figure 4A of the application).

The pending claims

The Official Action reads "wire" onto wire rod 1b of Figure 2. But see that Figure 1A discloses that a plurality of core threads 11 are twisted. See also specification page 1, lines 20-21. In the AAPA, a minimum unit of a wire 1a is a core thread 11. TAYLOR discloses in Figure 1 that a core bundle b comprises a plurality of strands of insulated wire 10. In TAYLOR, a minimum unit of an electric cord is an insulated wire 10, which is covered with an insulator 12. Therefore, a core bundle B of TAYLOR corresponds to a wire 1a of the AAPA.

TAYLOR does not disclose that a core bundle B is wound by a conductor on a plurality of strands of insulated wire 10, and

since AAPA does not disclose an insulated conductor, one of skill would not produce the invention of an electric cord covered with an insulated conductor as presently disclosed and recited.

Consider independent claim 9.

Claim 9 begins reciting plural wire rods, positioned adjacent each other and electrically isolated from each other, forming a single electrical signal pathway. This reads on wire rod 2b of Figure 5 and corresponds to wire rod 1b of AAPA Figure 2.

The claim next reads "the plural wire rods formed of plural wires positioned adjacent each other and electrically isolated from each other". See 2a of Figure 5 and wires 1a of AAPA Figure 2.

The claim also recites "each wire comprising:"

"a center core formed by a plurality of uninsulated core threads twisted upon each other,"

"a conductor wound on the center core, and"

"an insulator covering a surface of the conductor and a surface of the wire."

See core threads 21, conductor 22, and insulator 23 of Figure 4A. As to the AAPA see core threads 11 and conductor 12 of Figure 1. The AAPA, as modified by TAYLOR, would have the core threads 11 insulated, but conductor 12 would remain uninsulated.

Therefore, claim 9 is non-obvious.

Also see claim 13 and Figure 7B. This claim recites that a part of an exterior surface of the conductor directly contacts the center core, recited as comprising a plurality of uninsulated core threads.

Applicants do not see that the AAPA, as modified by TAYLOR, would meet this recitation.

Further see claim 18 and Figure 6. This claim recites that there are three wire rods, positioned adjacent each other and electrically isolated from each other, and that the three wire rods formed are each form of three wires positioned adjacent each other and electrically isolated from each other.

Applicants do not see that the AAPA, as modified by TAYLOR, would meet these recitations.

New claim 19 recites that a minimum unit of each wire is the core thread. This is believed to further distinguish the invention, even in view of the Official Action's reading of the claims onto Figures 1-3. Applicants do not see that the AAPA, as modified by TAYLOR, would meet this recitation, wherein the core thread is uninsulated as required by claim 1.

As to claim 1, see the recitation that each wire comprises a plurality of uninsulated core threads. As modified by TAYLOR, the AAPA would have insulated core threads and not uninsulated core threads.

See the recitation that the respective wires are electrically insulated from each other. As modified by TAYLOR,

the AAPA would have uninsulated conductors 12 and therefore would not be electrically insulated from each other.

Accordingly, claim 1 is non-obvious.

See also claim 3 reciting that "each of the wires is constituted by the plurality of core threads and a conductor wound on the surface of the plurality of core threads, and the surface of the conductor is covered with an insulator."

The AAPA, as modified by TAYLOR would have the core threads insulated but would not insulate the conductor 12. Thus, the features of this claim would not be satisfied.

Similarly, claim 4 recites each of the wires is constituted by the plurality of [uninsulated] core threads and a conductor wound on the surface of the plurality of core threads, and the surface of each of the wires is covered with an insulator.

The AAPA, as modified by TAYLOR would have the core threads insulated but would not insulate the conductor 12. Thus, the features of this claim would not be satisfied.

Claim 8 recites wires constituted by a plurality of adjacently contacting uninsulated core threads and a conductor wound on the surface of the plurality of core threads. The AAPA, as modified by TAYLOR would have the core threads insulated. Thus, this feature of adjacently contacting uninsulated core threads would not be satisfied.

The further recitation of the respective wires are electrically insulated from each other would also not be satisfied by the AAPA modified by TAYLOR.

Thus, these claims are each believed to be non-obvious.

In contrast to the AAPA as modified by TAYLOR, in the present invention, the core threads (21) are not insulated within each wire (2a). Rather, each wire (2a) is insulated from adjacent wires (2a) by the outer insulated wire conductor (22, 23) as shown by, e.g., Figure 5 or by outer insulated wire conductor (32, 33) as shown by, e.g., Figure 8.

Thus, TAYLOR and the present invention differ as to whether a minimum unit of a wire is insulated or not. Even if the skilled person in this field combine TAYLOR with AAPA, the resulting electric cord would be formed with a plurality of insulated core threads as in TAYLOR, not an electric cord by winding a conductor on the surface of a plurality of uninsulated core threads.

In summary, the disclosure of TAYLOR is to insulate each of the individual core threads. Therefore, TAYLOR would lead one of skill to modify the AAPA of Figures 1-3 to insulate each of the individual core threads. As TAYLOR is in direct contrast to the invention's recited structure, one cannot say that the presently-pending claims are obvious. Therefore, the present application is believed to be patentable over AAPA in view of TAYLOR.

Reconsideration and allowance of all the pending claims  
are respectfully requested.

The Commissioner is hereby authorized in this,  
concurrent, and future replies, to charge payment or credit any  
overpayment to Deposit Account No. 25-0120 for any additional  
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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